REMARKS

Claim Status

Claims 7-29, 31 and 32 remain pending in the present application.

Art-Based Rejections

Claims 7-29, 31 and 32 stand rejected over U.S. Patent No. 5,848,373 (hereafter referred to as "the DeLorme patent") in view of U.S. Patent No. 6,748,362 (hereafter referred to as "the Meyer patent"). We expressly traverse these rejections.

Claim 7

Claim 7 recites an apparatus including an input device to capture an image of a map. The map includes a digital watermark embedded therein. The digital watermark includes location information associated with the map. Software instructions, stored in memory of the device, obtain the location information from the watermark in the captured image. The location information – retrieved from the map itself – is compared to GPS data. A correlation of the information is then output.

The DeLorme patent is not understood to teach or suggest machine-capturing image data of the map itself and obtaining information there from as contemplated by claim 7 (*cf.* the Office Action at page 4, lines 9-14).

Instead, the DeLorme patent suggests receiving GPS data for a current location, and relying on a user to "intuitively" locate that position on a map. (See, e.g., Fig. 1 and Col. 19, line 41 – Col. 20, line 7). For example, in the DeLorme patent at Fig. 1, a user reads map grid location (C3) from a GPS device and then uses his finger to locate the corresponding grid location (grid C3) on the map.

And DeLorme's reference to a scanner seems more akin to data capture for display. For example, the DeLorme patent discloses that a person may hand-write information on a map, and then, with a handheld scanning device, subsequently digitizing that information for display on a computer 110 or printer 112 (see FIG. 14F and Col. 63, line 56 – Col. 64, line 6). But this is not digital watermarking. Nor is this using watermark information in a map to trigger a correlation.

Indeed, the DeLorme patent is not understood to teach or suggest digital watermarking for embedding location information in a map, and using this watermarked map to help identify a location.

We have reviewed the DeLorme sections cited by the Examiner (e.g., see the Office Action at page 4, lines 13-14 citing DeLorme at: FIGS. 1-6, Col. 4, lines 1-38, Col. 6, lines 21-42, Col. 11, lines 6-19 and Col. 60, line 61 – Col. 61, lines 38), and, contrary to the suggestion in the Office Action, we do not see reference to digital watermarking or steganographic encoding. *Clarification is respectfully requested if the Office maintains this rejection.*

The Meyer patent does not remedy these deficiencies. The Meyer patent is cited for teaching a digital watermark. But the Meyer patent is silent on watermarking location information in the manner contemplated in claim 7.

We remain curious on how to use the primary techniques discussed in Meyer patent to implement the invention. For example, the Meyer patent seems to focus on embedding compressed digital files, and not on embedding location information in the physical map of claim 7. *Clarification is requested if the Office maintains this rejection.*

We respectfully submit that claim 7 should be allowed.

Claim 20

The DeLorme patent fails to teach or suggest the combination as recited in claim 20.

The only mention we see of a "sign" is in Figs. 14A, 14D, 14E ("First St." and "Main St." and Figs. 15A and 15E ("Stop" sign).

But, in contrast to the Office's suggestion on page 11, line 18, there is **no** teaching of capturing an image of the First St. or the Stop sign to decode information there from, or that the sign is even encoded with digital watermarks.

The Meyer patent is deficient in these regards also. The Meyer patent seems focused on encoding compressed digital files – not encoding, e.g., street signs.

The Office seems to recognize DeLorme's deficiencies on page 12, lines 2-4.

Claim 20 should be allowed because the applied references fail to teach or suggest each of the claimed features.

Claim 14

Similar to the discussion above with respect to claim 20, the DeLorme patent and the Meyer patent each fail to teach or suggest a sign having plural bit data encoded thereon in the form of a digital watermark, the data comprising a unique identifier.

Moreover, the Office has failed to show how the teachings of Meyer (e.g., compressed digital files) would be helpful in watermarking a street sign. Again, clarification is requested if the Office maintains this rejection.

Claim 14 should be allowed.

Claim 11

Claim 11 requires that a digital watermark be read from a map including embedded digital watermarks.

The DeLorme patent is not understood to teach machine-reading digital watermarks from a map which includes location information to uniquely identify the map. The fact that the Meyer patent discusses watermarking compressed digital files is not helpful to suggest that a map should be so marked.

Moreover, the applied documents fail to teach or suggest comparing watermark location information to a physical location, and providing feedback to correlate the watermark location information and the physical location.

We respectfully request that claim 11 be allowed.

Claim 12

Claim 12 recites a map divided into a plurality of areas, with each area comprising at least one embedded digital watermark including location information for the respective area.

The office concedes on page 10 of the Office Action that the DeLorme patent does not teach that the areas are embedded with a watermark including location information for the respective area.

The Meyer patent is also deficient in this regard. The Meyer patent's encoding is not understood to embed location information into different – and respective – regions of an image.

The combination recited in claim 12 is not disclosed or suggested in the applied references. Thus, claim 12 should be allowed.

Claim 24

Like so many of the previously discussed claims, claim 24 considers a map including digital watermarks embedded therein. And, like claim 12 discussed immediately above, the map is divided into a plurality of areas, with each area comprising at least one embedded digital watermark including location information for the respective map area. Here, claim 24 is directed to an apparatus capable of reading the watermarks from the map.

The DeLorme patent does not consider such.

The cited passages of the Meyer patent do not teach such. In addition, the focus of the Meyer patent seems to be on digital files, not receiving optical scan data corresponding to at least a portion of a respective map area, where the optical scan data includes a watermark including location information, in combination with the other features of claim 24.

Remaining claims

The remaining independent claims should also be allowed based on reasons analogous to those discussed above. The dependent claims are also believed to be patentable in their own right. Favorable consideration is requested.

Information Disclosure Statement

An Information Disclosure Statement is filed concurrently herewith. Consideration of the information disclosed therein is respectfully requested.

Conclusion

The application is believed to be in condition for allowance. An early notice of allowance is respectfully requested. (Applicants need not belabor the other shortcomings of the art at this time.).

Nevertheless, the Examiner is invited to telephone the undersigned at 503-469-4685 if any issue remains.

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Respectfully submitted,

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